

5

Abstract

10

15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100

A CODEC system for spatially scalable video data includes a decimate unit for performing DCT-based down-sampling with respect to macro block data of input video data to produce decimated block data representing low frequency part of the macro block data, a first encoder for encoding the decimated block data to produce base layer DCT data having DCT coefficients representing the low frequency part, a first decoder for decoding the base layer DCT data from the first encoder to produce base layer block data, an interpolate unit for performing DCT-based interpolation with respect to the base layer block data from the first decoder to produce interpolated base layer block data, a second encoder for encoding enhancement layer block data obtained from the macro block data and the interpolated base layer block data to produce enhancement layer DCT data wherein the enhancement layer block data representing high frequency part of the macro block data, and a second decoder for decoding the enhancement layer DCT data from the second encoder to produce reconstructed macro block data.